Amendments to the Abstract:

The amendment is amended to comply with the maximum word length required by the Examiner as shown on the following page showing annotated changes followed by a Replacement Abstract.

METHOD OF AND SYSTEM FOR FAULT-TOLERANT INDEXING

Abstract

~~The dictionary entry is stored in the fifteen combinations formed by the central index and five adjacent decoding spheres.~~ A data dictionary uses a reverse error correction ~~code~~ procedure to identify near matches,[[.]] ~~A preferred embodiment of the data dictionary utilizes~~ tolerating mismatches at Hamming's distance 2 utilizing pairwise combinations of indices of a central index decoding sphere and all adjacent decoding spheres (each index identified as a vector defining the center of the decoding sphere) to form sets of hash indices ~~into which~~ for storing a dictionary entry ~~is stored~~. ~~Thus, in the case~~ Using a Golay code procedure, this arrangement resolves the cases of dictionary entries at ~~a distance~~ distances three and two from the center of a particular central index decoding sphere, ~~the twenty-one adjacent decoding spheres are located and identified by their respective center points or vectors describing the center points of these spheres~~. In the former case ~~of dictionary entries at a distance three~~, five adjacent decoding spheres are identified with the dictionary entry stored in the fifteen pairwise combinations formed by the central index and these five adjacent spheres. In the latter case, the twenty-one adjacent decoding spheres are identified, and the data entry is stored. ~~The dictionary entry is stored (or searched for)~~ in the twenty-one ~~combinations~~ concatenated arrangements formed by ~~a lexigraphic ordering of pairs of~~ the central index ~~decoding sphere with~~ and the twenty-one adjacent decoding spheres. ~~Likewise, in the case of distance three entries.~~

METHOD OF AND SYSTEM FOR FAULT-TOLERANT INDEXING

Abstract

A data dictionary uses a reverse error correction procedure to identify near matches, tolerating mismatches at Hamming's distance 2 utilizing pairwise combinations of indices of a central index decoding sphere and all adjacent decoding spheres (each index identified as a vector defining the center of the decoding sphere) to form sets of hash indices for storing a dictionary entry. Using a Golay code procedure, this arrangement resolves the cases of dictionary entries at distances three and two from the center of a particular central index decoding sphere. In the former case, five adjacent decoding spheres are identified with the dictionary entry stored in the fifteen pairwise combinations formed by the central index and these five adjacent spheres. In the latter case, the twenty-one adjacent decoding spheres are identified, and the data entry is stored in the twenty-one concatenated arrangements formed by the central index and the twenty-one adjacent decoding spheres.